

ABSTRAK

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Judul Laporan : Perbaikan Tingkat *Downtime* Pada Mesin *Exhaust Fan Painting* Dengan Pendekatan *Total Productive Maintenance* Di Industri Manufaktur Bumper
Skripsi
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Proses pembuatan bumper melewati berbagai proses, salah satu proses tersebut ialah *painting*. Selama tiga tahun terakhir sering terjadi *stop line* dikarenakan masalah *Breakdown* pada *exhaust fan*. Penelitian ini bertujuan untuk menganalisis penyebab masalah pada *Breakdown* dan melakukan perbaikan untuk meningkatkan kinerja dan efektivitas mesin tersebut. Penelitian ini menggunakan metode *Total Productive Maintenance*. Obyek penelitian dilakukan pada mesin *Exhaust Fan*. Hasil penelitian penerapan TPM dapat memperbaiki kinerja mesin, hal ini adalah di lihat dengan memperbaiki nilai OEE dari 57% ke 85%, kemudian penyebab terjadinya *Downtime* dari aspek *Machines*, adalah impellor kotor, hal ini menyebabkan penumpukan debu pada impellor yang menyebabkan getaran mesin meningkat dan hal ini juga menyebabkan kotoran atau debu tersebut jatuh dan mengenai produk. Aspek *Personnel*, *Downtime* terjadi dikarena etos autonomus maintenance, operator tidak mengerjakan SOP pengoprasian mesin, dan basic skill pengoprasian masih kurang. Pada aspek *Methods* planned maintenance tidak rutin dilakukan, no daily check, dan autonomus maintenance belum dilakukan. Aspek *Environment* terjadi ruangan berdebu dikarenakan sistem ventilasi yang buruk, dan kurangnya pembersihan rutin, tidak terlaksanakannya 5R (Rapi, Resik, Rawat, Rajin, dan Rasional). Dalam mengurangi *Downtime* perlu dilakukan Perbaikan Terfokus (*Focused Improvement*), Pemeliharaan Mandiri (*Autonomous Maintenance*), Pemeliharaan Terencana (*Planned Maintenance*), Pemeliharaan Kualitas (*Quality Maintenance*), & *Training & Education*.

Kata kunci: *Breakdown, Downtime, Exhaust Fan, Industri Manufaktur, Total Productive Maintenance*

ABSTRACT

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Title Internship Report : *Downtime Improvement of Painting Exhaust Fan Machine Using Total Productive Maintenance Approach in Bumper Manufacturing Industry*
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The process of manufacturing bumpers involves various stages, one of which is painting. Over the past three years, there have been frequent stoppages due to Breakdown issues with the exhaust fan. This research aims to analyze the causes of Breakdown problems and implement improvements to enhance the performance and effectiveness of the Machine. The research utilizes the Total Productive Maintenance (TPM) method. The object of the study is the Exhaust Fan Machine. The research results show that the implementation of TPM can improve Machine performance, as evidenced by the improvement in Overall Equipment Efficiency (OEE) from 57% to 85%. The causes of Downtime from the Machine aspect include a dirty impeller, which leads to dust accumulation and increased Machine vibrations, resulting in the deposition of dirt or dust on the products. In terms of personnel aspect, Downtime occurs due to a lack of adherence to standard operating procedures (SOP) and insufficient basic operational skills. Regarding the method aspect, there is a lack of routine planned maintenance, no daily checks, and the absence of autonomous maintenance. In the environmental aspect, the presence of a dusty environment is attributed to poor ventilation systems and inadequate regular cleaning practices, along with the failure to implement the 5R principles (Sort, Set in Order, Shine, Standardize, Sustain). To reduce Downtime, it is necessary to implement Focused Improvement, Autonomous Maintenance, Planned Maintenance, Quality Maintenance, and Training & Education

Keywords: Breakdown, Downtime, Exhaust Fan, Manufacture Industry, Total Productive Maintenance